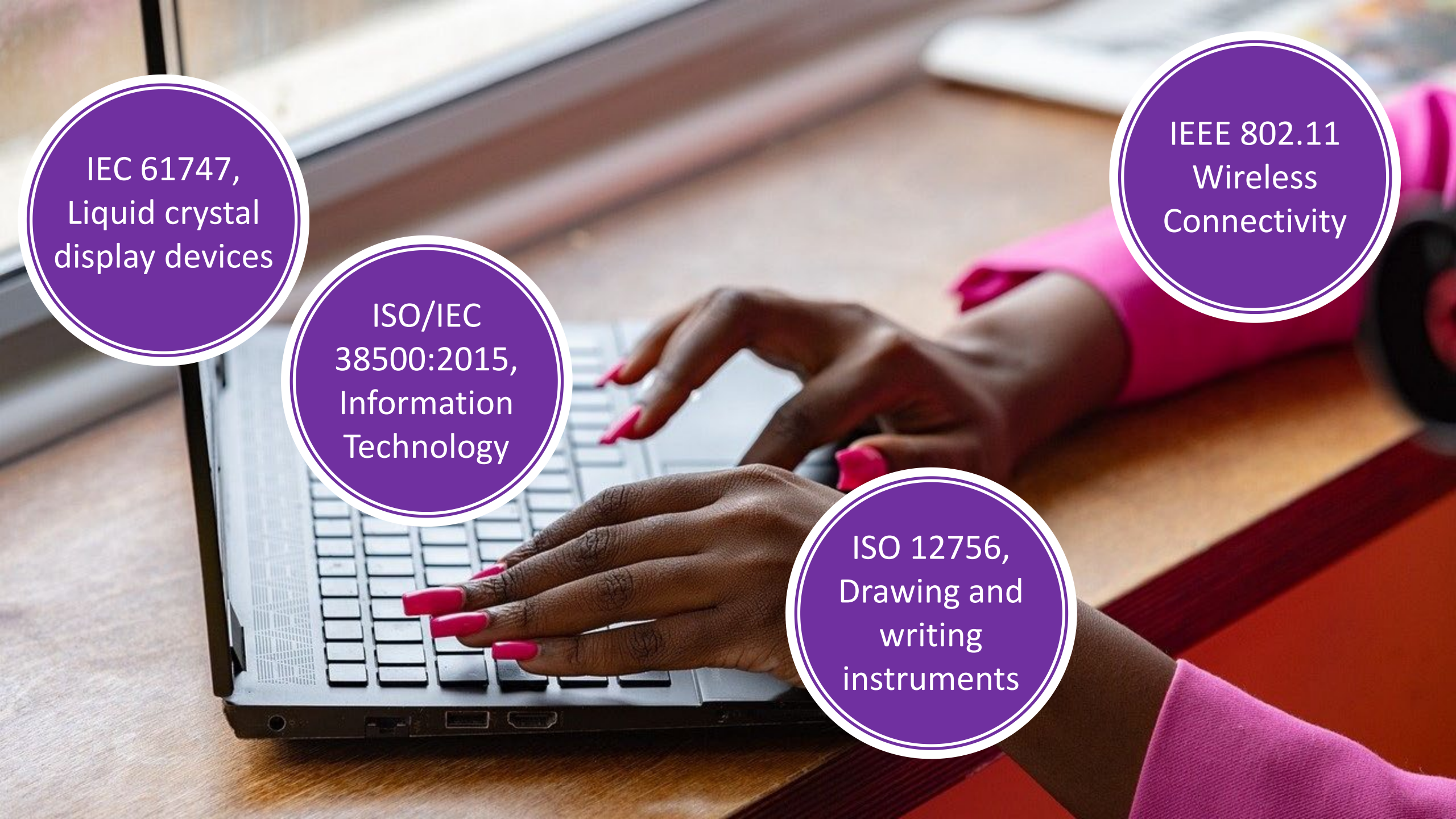


# U.S. GOVERNMENT NATIONAL STANDARDS STRATEGY FOR CRITICAL AND EMERGING TECHNOLOGY (USG NSSCET)

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Office of the Director





IEC 61747,  
Liquid crystal  
display devices

ISO/IEC  
38500:2015,  
Information  
Technology

IEEE 802.11  
Wireless  
Connectivity

ISO 12756,  
Drawing and  
writing  
instruments

# Standards Participation Models



## National Participation

One country,  
one vote

Multilateral and treaty-based



National delegation private  
organizations



## Direct Participation

Individual or organizational  
participation

Multi-stakeholder and  
membership-based



## Consortia

Structure, participation,  
and process can vary

Often formed to create standards in  
a focused area quickly



# Standards “System” Comparison



## In the U.S.

- Voluntary, decentralized and market-driven
- Led by private sector
- Public-private partnership
- Differs from centralized standards systems in other countries
- Reflects U.S. culture and public-private sector dynamics
- Relies on cooperation, communication and parity among diverse stakeholder
- ANSI is the private sector coordinator of many U.S. domiciled standards organizations and the U.S. member to ISO and IEC



## In the EU

- European Economic Area (EEA)
- European Commission (EC) mandates the development of EN standards to support regulatory objectives
- National Standards Bodies (NSBs) are voting members for EC requests made to the European Standards Organizations (ESOs)
- Agreements between ESOs and ISO and IEC result in ISO and IEC standards routinely used as the basis of EN standards
- EU regulatory system gives a presumption of conformity to EN standards
- EU member states are individual members of ISO, IEC, and ITU



## In the PRC

- Central government organized by the Standards Administration of China (SAC)
- Developing a tiered standards system
  - National Standards (SAC)
  - Sector Standards (SAC Coordinated)
  - Local Standards (SAC Coordinated)

### China 2035 Initiative

- Launched in March 2018
- Developed by SAC
- Research standardization strategies to inform PRC's strategy
- Focused on PRC national standards for priority areas
- Increase PRC private sector standards development
- Increase PRC participation and leadership in international standards





The USSS sets a strategic vision to support **U.S. competitiveness, innovation, health and safety, and global trade**, guiding how the U.S. develops and uses standards, and participates in the international standards development process.

The U.S. standards system is based on a **public-private partnership** and embraces the participation of all affected stakeholders, making it dynamic, flexible, and responsive to market needs.

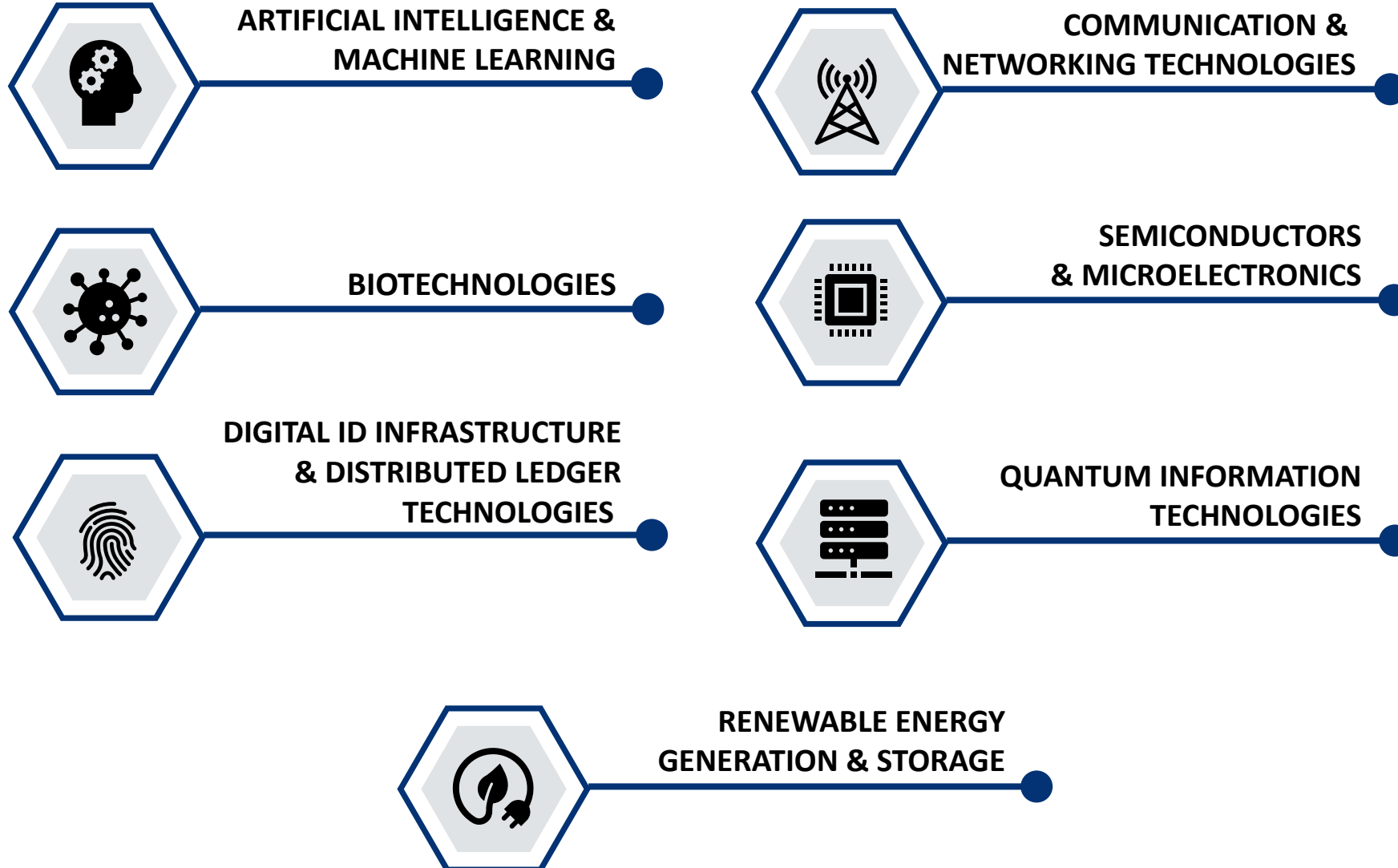
# U.S. LEADERSHIP IN STANDARDS FOR CET



**The U.S. Government National Standards Strategy for Critical and Emerging Technology (USG NSSCET)** supports the development of federal standards policy to ensure continued U.S. global economy competitiveness and technology leadership

Working with other Departments and Agencies, **NIST leads the implementation of the Strategy**

# CRITICAL & EMERGING TECHNOLOGY IDENTIFIED IN THE USG NSSCET





# USG NSSCET OVERVIEW



## Greater Investment in Pre-Standardization Research

- Increase R&D funding for CETs
- Support development of standards that address risk, security, and resilience

## Participation in Standards Development

- Remove and prevent barriers to private sector participation
- Improve communication between public and private sector
- Enhance USG representation and influence in international standards governance and leadership

## Workforce Development

## Ensuring Integrity in Standards Development

- Deepen standards cooperation with partners and allies
- Facilitate broad representation in standards development

View the Strategy: [www.nist.gov/standardsgov/usg-nss](https://www.nist.gov/standardsgov/usg-nss)

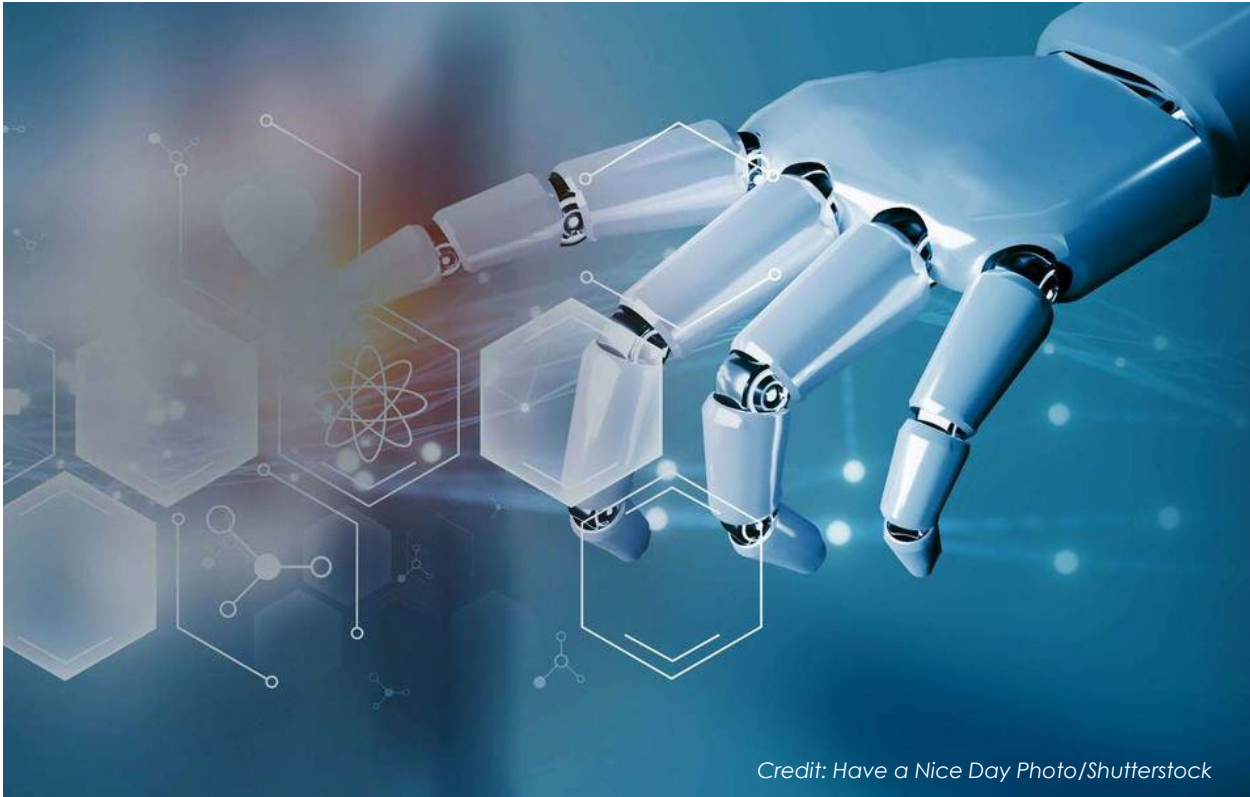
# UNITED STATES GOVERNMENT NATIONAL STANDARDS STRATEGY FOR CRITICAL AND EMERGING TECHNOLOGY

MAY 2023





# IMPLEMENTATION PLANNING: STAKEHOLDER INPUT



The U.S. Government National Standards Strategy for Critical and Emerging Technology (USG NSSCET) was released in May 2023

## **Published a request for Information (RFI)**

- Input on how to best implement the Strategy
- Input on investment, participation, workforce, and integrity, and inclusivity
- Responses submitted by December 22, 2023

## **Held listening sessions and stakeholder engagements**

- 100+ events

## **Established a Subcommittee on U.S. International Standards Development Activity**

- Under the NIST Visiting Committee on Advanced Technology

# INNOVATION STAKEHOLDERS



U.S. leadership in the U.S. innovation ecosystem requires collaboration among a diverse set of participants.





# KEY FINDINGS: RFI AND LISTENING SESSIONS

## Public-private sector coordination

- work effectively in consortia and communities of practice
- develop and promote adoption of sector-specific standards including those critical to national security, public safety, security, health and environmental health and resilience

## Federal Government coordination

- coordinate pre-standardization R&D investments
- coordinate activities, proposals, leadership opportunities, and engagement
- support the integrity of the international standards system
- promote WTO TBT Committee principles

## Foreign government coordination

- work with likeminded partners and allies to ensure CET standards are developed to support U.S. interests
- advocate for a commitment to free and fair market competition
- advance trade policy and agreements that are technology neutrality and promote technology adoption

## Standards funding opportunities

- target academia and small- and medium-sized enterprises (SMEs)





# KEY FINDINGS: RFI AND LISTENING SESSIONS

## Standards education

- enhance educational efforts and leverage academia as a critical partner to increasing U.S. engagement and training the next generation of standards professionals
- renew a commitment by academia to teaching the value and use of standards in a range of career fields

## Standards communications

- explain the role of U.S. government and academia in our system
- provide education and awareness for senior leaders in industry, government, and academia
- understand the value of our system with regards to competitiveness and innovation in a range of career fields
- engage a wide range of market participants in standards efforts
- engage Congress to bolster support for R&D in CET and increase investment in pre-standardization research

## Real and perceived barriers

- **reduce visa wait times**
- identify and eliminate knowledge gaps between U.S. policymakers and technical program leaders
- enhance government participation where government is the member (e.g., ITU)
- facilitate engagement by providing standards information, education, and to raise awareness among underrepresented stakeholders

# USG NSSCET IMPLEMENTATION ROADMAP



**Provides** guiding principles of the NSSCET Implementation Roadmap

**Recommends** immediate actions to track and evaluate current Federal Department and Agency actions

**Recommends** immediate actions for Federal Departments and Agencies to identify opportunities for collaboration and use of line-item budget submissions to address USG NSSCET goals

**Recommends** long-term actions that will result in broad Outcomes for sustained implementation

# SHARE YOUR FEEDBACK



**[www.nist.gov/standardsgov/usg-nss](http://www.nist.gov/standardsgov/usg-nss)**

The Standards Information Center provides a gateway to navigating the dynamic U.S. and international standards landscape



The USA Enquiry Point for the World Trade Organization (WTO)



**[www.standards.gov](http://www.standards.gov)**